

Understanding and Assessing Climate Change: Preparing for Nebraska's Future

2024 Climate Change Impact Assessment Report

Chapter 14 - Nebraskans' Perceptions of Climate Change



Chapter 14

Nebraskans' Perceptions of Climate Change

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Key messages

1. Most Nebraskans agree that climate change is happening and that human activities cause it.
2. Political views heavily shape perceptions about climate change.
3. Younger Nebraskans are more likely than older ones to see climate change as human-caused and support actions to manage it.
4. Local experiences, including extreme weather events, affect how Nebraskans view climate change.

Introduction

Nebraskans are experiencing the effects of climate change, both directly and indirectly, as changing weather patterns, intensifying extreme events, shifting growing seasons, and impacting communities across the state (see Chapters 8, 10, and 11). Views about climate change among Nebraskans and the broader U.S. public are complex. They often reflect an interplay of social, psychological, geographic, and scientific factors that are not simply a matter of accepting or denying the available evidence. Research examining public perceptions of climate change finds that recognizing and acknowledging how and why people form their views—by considering local values and experiences—provides deeper insight into the social dimensions of climate science.

Nebraskan’s opinions and attitudes

Surveys indicate that most Nebraskans (67%) believe climate change is occurring, and 52% attribute it to human-caused greenhouse gas emissions (Marlon et

al., 2023). These figures are comparable to, but slightly lower than, national averages, where 72% of Americans believe climate change is happening, and 58% link it to human activities (Marlon et al., 2023). Although more than half of Nebraskans express concern, the level of worry and trust in scientific evidence has gradually shifted. Stark differences in views about climate change exist along political lines. A 2019 survey found that 86% of Democrats in Nebraska expressed concern about climate change, compared to 64% of moderates, and 30% of Republicans. While 5% of Democrats reported that they were “not at all concerned,” this rose to 43% among Republicans (Bureau of Sociological Research, 2019). These data, and those from other studies, illustrate that individuals’ stances about climate change tend to be closely tied to their social identities and community affiliations (Ehret et al., 2018; Hornsey et al., 2016; Kim et al., 2023).

Researchers studying attitudes toward climate change find differences in views, despite the scientific consensus that human activity is causing climate change (Lynas et al., 2021; Myers et al., 2021). These differences reflect factors beyond scientific evidence,

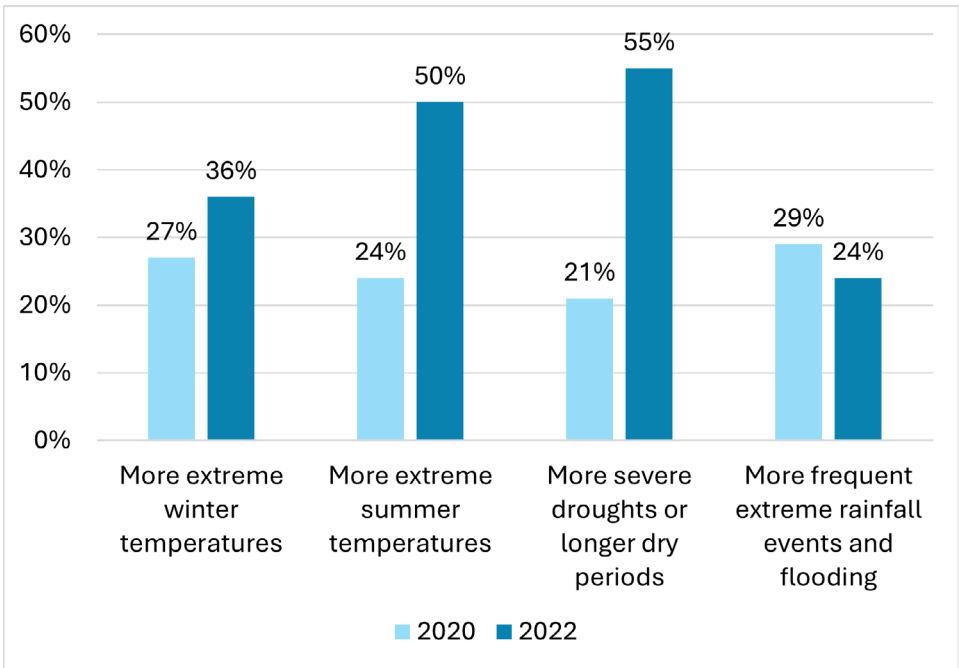


Figure 14.1. Rural Nebraskans’ concerns about future extreme weather events, 2020 (N = 1,979) and 2022 (N = 1,105). (Source: Vogt et al., 2022)

such as personal experiences, social values, political affiliations, and collective identities (Kahan et al., 2012; McCright & Dunlap, 2011). Even when individuals are aware of the scientific evidence of climate change, it may not influence beliefs. Instead, beliefs are often tied to community norms and personal experiences. Political polarization, mistrust, and exposure to misinformation can further reinforce these viewpoints (Bugden, 2022; Mashamaite, 2023; Treen et al., 2020).

Generational differences also play a role in shaping climate change perceptions. Younger Nebraskans, including Millennials (born between 1981 and 1996) and Generation Z (born between 1997 and 2012), show higher levels of concern about climate change than older Nebraskans and are more likely to attribute climate change to human causes (Vogt et al., 2015, 2022). Surveys find that younger populations often support policies that address climate change mitigation and adaptation, like expanded use of renewable energy, adoption of new agricultural methods, and other efforts to reduce greenhouse gas emissions (Funk, 2021). In contrast, while older Nebraskans are becoming more knowledgeable about climate change, they

may express deeper skepticism that human activities cause climate change and associate less urgency about addressing it. These generational patterns in Nebraska parallel national trends. Younger populations of Americans are expressing stronger feelings about the personal relevance of climate change and concern about the future than older ones (Funk, 2021).

Agriculture is central to Nebraska's economy and cultural identity, which makes local experiences with the changing climate particularly relevant. Extreme weather events—including flooding and drought (see Chapters 2 and 3)—are altering growing seasons and agricultural production methods in ways that will impact many Nebraskans' livelihoods (see Chapter 8) (Zobeidi et al., 2020). While many in agricultural communities are experiencing these changes firsthand, some express uncertainty about the influence of human activities or raise concerns about the effectiveness of climate change policies. They worry that these policies could undermine traditional production practices and local economies (Calloway et al., 2022; Howard et al., 2020; James et al., 2014).

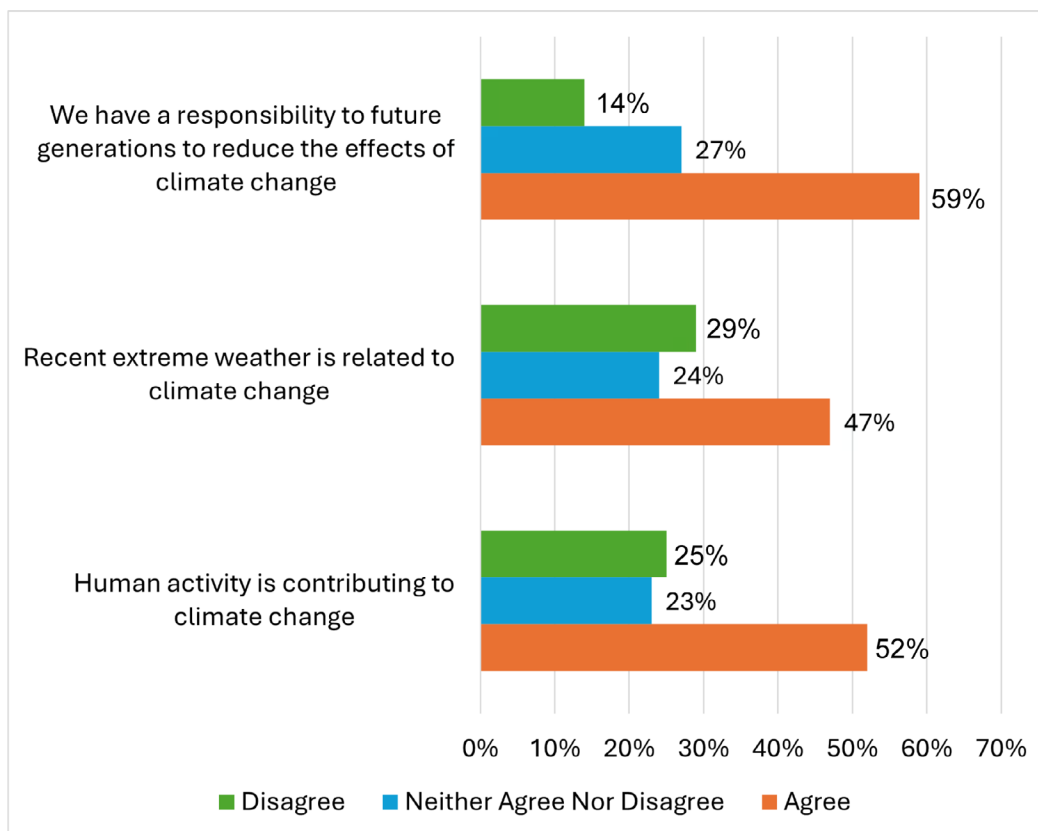


Figure 14.2. Rural Nebraskans' views toward climate change, N = 1,105. (Source: Vogt et al., 2022)

Insights from the Nebraska Rural Poll suggest that rural Nebraskans have noticed changes in the climate in their communities. According to the 2022 Nebraska Rural Poll, many report observing changes in local weather patterns (Figure 14.1) and environmental conditions. Concerns about these effects vary across regions of the state. For instance, 89% of Panhandle residents are concerned about more extreme droughts in the future. However, the extent to which Nebraskans attribute these changes to human activities also differs. Some Nebraskans express skepticism or uncertainty about human influence, while others acknowledge this influence and express deep concern about the impact on future generations (Figure 14.2) (Vogt et al., 2022). In Nebraska's rural communities, the acknowledgment of climate variation often stems from firsthand experience with changing precipitation, temperature fluctuations, or altered growing seasons. While many rural Nebraskans demonstrate social resilience—often embodied in the phrase “Nebraska Strong”—climate change effects are taking a toll on individuals’ mental health, particularly those working in agriculture. This is predicted to worsen in the coming years (Howard et al., 2020).

Factors influencing public opinion

Media coverage has influenced perceptions of climate change (Boykoff & Boykoff, 2007; Diehl et al., 2021). Past analyses of U.S. media identified a pattern of “false balance,” where coverage treated established science and fringe skepticism as equally credible viewpoints (Adam et al., 2020; Chinn & Pasek, 2020; Dixon et al., 2015). Although many outlets have moved away from this approach, the legacy of these early media portrayals continues to affect public memory. Strategic disinformation campaigns have also undermined public understanding of climate change. Some special interest groups and corporations have invested in efforts to cast doubt on scientific consensus or downplay the seriousness of the issue (Boussalis & Coan, 2016; Brulle et al., 2020; Supran et al., 2023). Such messaging often aligns with existing political divides, reinforcing skepticism and discouraging open dialogue.

Declining trust in scientists, government officials, and

other institutions has also influenced how climate information is received (Kennedy & Tyson, 2023; Kulin & Johansson Sevä, 2021). In Nebraska and elsewhere, where scientific information may come from universities, government agencies, and media, diminished trust can hinder the acceptance of new evidence or engagement with proposed strategies. Some members of the public may question institutions’ objectivity or suspect that climate policies may not align with local priorities. Recognizing that trust stems from a history of positive and negative interactions between communities and institutions is one explanation of why perspectives can diverge from scientific consensus (Bugden, 2022). Research suggests that recognizing and valuing the perspectives of all Nebraskans, including those who challenge science, can enhance understanding of the social realities shaping climate discourse (Calloway et al., 2022; Miner et al., 2023). Skepticism or denial may stem from legitimate economic worries, cultural identity, or apprehension about external decision-making rather than a mere lack of information (Kahan et al., 2012; Kulin & Johansson Sevä, 2021; Wong-Parodi et al., 2016).

Conclusions

This multidimensional picture of climate change perception is essential for understanding the complex ways people engage with the issue of Nebraska’s changing climate. Evidence from surveys, interviews, and observational studies suggests that how people interpret climate data, weigh scientific findings, and consider solutions is incredibly complex. Agricultural adaptations, shifts in energy use, levels of trust, media use, and direct experiences are interrelated with social, cultural, and political contexts. Acknowledging and valuing the full spectrum of perspectives (see Chapters 8 and 10), including those that challenge scientific consensus, offers a more nuanced understanding of why certain views persist (Bremer & Meisch, 2017; Miner et al., 2023). As public responses evolve and communities navigate the changing climate in our state, the paths forward—including approaches to mitigation, adaptation, and resource management—are likely to be guided as much by these social dimensions as by the underlying scientific and environmental realities.